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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/796,681	03/09/2004	Karsten Hackbarth	H 5265	2641

423 7590 04/28/2005

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EXAMINER

HUANG, MEI QI

ART UNIT	PAPER NUMBER
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1713

DATE MAILED: 04/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/796,681

Applicant(s)

HACKBARTH ET AL.

Examiner

Mei Q. Huang

Art Unit

1713

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 March 2005.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) 8-27, 29 and 30 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 28 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-30 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 07/12/2004.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claim 1-7 and 28, in the reply filed on March 28, 2005 is acknowledged. In view of applicant's response, the groups II and III will be joined with the group I if the group I is found allowable.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3 and 5 are rejected under 35 U.S.C. 102(b) as being anticipated by Shustack (US Pat. 5,128,391).

The prior art to Shustack relates to an extensible and pasteurizable radiation curable coating for metal. The ingredients in the coatings are

(a) 15-75 wt% of ethylenically unsaturated monomer as defined by a general formula disclosed at column 2, line 45-60, and column 5, line 29-65, which meets the instantly claimed component (b);

(b) 10-80 wt% of an oligomer component that is a mixture of (i) at least one of an urethane acrylate oligomer or urethane methacrylate oligomer, and (ii) at least one of an

Art Unit: 1713

epoxy acrylate oligomer or epoxy methacrylate oligomer described at column 2, line 61-66, and column 6, line 5-26, which meets the instantly claimed component (a); and (c) 0.1-10 wt% of an organofunctional silane adhesion promoter described at column 2, line 67-68, column 8, line 61-68, and column 9, line 1-40, and other additives mentioned including photoinitiator, dyes and pigment (column 4, line 1628), which meets the instantly claimed component (d).

Shustack further teaches that the numerous other mono- multifunctional monomers, which are compatible with the basic composition may be included therein, in an amount of up 30 wt% (column 12, line 11-21), which meets the instantly claimed component (c).

In terms of the limitation of the viscosity of the coating material in Claims 1-2, as discussed above, the coating composition prepared by Shustack is substantially identical to the claimed composition. Therefore, it is the examiner's position to believe that the prior art composition must inherently possess the same viscosity. Since the PTO does not have proper means to conduct experiments, the burden of proof is now shifted to the applicant to establish an unobviousness difference. *In re Fitzgerald*, 205 USPQ 594 (CCPA 1980).

As to Claim 3, the description of an organofunctional silane material used, as an adhesive promoter, in an amount of 0.1-10 wt% can be seen at column 4, line 49-67. Examples of such organofunctional silane compound can be found at column 9, line 1-35.

As to Claim 5, the rejection made for Claim 1, component (d) described above in this Office Action would be applied herein to reject Claim 5.

Art Unit: 1713

In sum, all the limitations of Claims 1-3 and 5 are fully met by Shustack's disclosure.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shustack (US Pat. 5,128,391) in view of Shustack (US Pat. 5,128,387).

The prior art to Shustack' 391 is adequately presented in paragraph 4 previously in this Office Action and is incorporated herein by reference. Shustack' 391 does not include phosphoric or phosphoric methacrylate compound in the coating composition. Shustack' 387 discloses an extensible and pasteurizable radiation curable coating for metal with very similar ingredients (column 2, line 25-45). Shustack' 387 teaches that a methacrylated phosphoric acid is included in the coating composition in order to

Art Unit: 1713

promoter adhesion of the coating material (column 18, Claim 18, component (c)).

Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to incorporate the methacrylated phosphoric acid, as taught by Shustack' 387, in Shustack' 391's coating composition formulation, in order to promote the adhesion of the coating material, as taught expressly by Shustack' 387.

7. Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shustack (US Pat. 5,128,391) in view of Razavi (US Pat. 5,629,365).

The prior art to Shustack' 391 is adequately presented in paragraph 4 previously in this Office Action and is incorporated herein by reference. Shustack' 391 does not include a biocide in the coating composition. The prior art to Razavi relates to an UV-absorbing polymer latex as protective coating comprising methacrylate functionalized benzotriazole. Razavi teaches that the invented latex can be enhanced by a variety of other common coating additives including biocides (column 5, line 26-31). Thus, based on the common use of this additive, biocide, as taught by Razavi, it would have been obvious to those skilled in the art to incorporate such additive in the composition of Shustack' 391 in order to enhance the coating composition of Shustack' 391, and thus to arrive at the instant Claim 6.

8. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shustack (US Pat. 5,128,391) in view of Nagasawa et al. (US Pat. 4,205,018).

Art Unit: 1713

The prior art to Shustack' 391 is adequately presented in paragraph 4 previously in this Office Action and is incorporated herein by reference. Shustack' 391 does not include disperse silica or disperse aluminum oxide in the coating composition. The prior art to Nagasawa et al. discloses a resin coating composition comprising polymerizable oligomers (column 7, line 22-42). Nagasawa et al. teach that a finely divided powder of silica may be used as a thixotropic agent (column 12, line 3-5). Accordingly, it would have been obvious to one having ordinary skill in the art at the time the invention was made to employ such finely divided powder of silica, as taught by Nagasawa et al., in Shustack's coating composition formulation because Shustack teaches that other additives are preferably incorporated in the composition to impart desirable properties (column 3, line 3-4).

9. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shustack (US Pat. 5,128,391).

Comparison between the instantly claimed ranges and that of the prior art is tabled as following.

Component	Instantly Claimed Rang	Prior Art Range	Shustack (US 5,128,391)
a	45 – 85 wt%	25 – 50 wt%	Column 4, line 49
b	10 – 60 wt%	40 – 60 wt%	Column 4, line 37
c	0.5 – 10 wt%	Up to 30 wt%	Column 12, line 14
d	0.5 – 15 wt%	3 wt%	Column 14, Example I
e	Up to 20 wt%	0.1 – 10 wt%	Column 2, line 67

The prior art range, which either overlaps, is within or covers the instantly claimed range for the components a-e, respectively, is seen to render obvious the ranges as instantly claimed.

Priority

10. Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Germany on September 11, 2001. It is noted, however, that applicant has not filed a certified copy of the 10144531.8 application as required by 35 U.S.C. 119(b).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mei Q. Huang whose telephone number is (571) 272-3549. The examiner can normally be reached on 8am - 4pm, Mon. - Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wu can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 1713

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Mei Q. Huang
Examiner

April 22, 2005

TATYANA ZALUKAEVA
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read 'T. Zalukaeva', with a long, sweeping horizontal stroke extending to the right.